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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,532

07/06/2007

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EXAMINER

DOAK, JENNIFER L

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/594,532	<b>Applicant(s)</b> OGASAWARA, MASAKAZU	
	<b>Examiner</b> Jennifer L. Doak	<b>Art Unit</b> 2872	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 May 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 12-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/28/06, 7/6/07, 10/21/08</u> .                               | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of Group I in the reply filed on 5/26/09 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 12-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to one or more nonelected inventions, there being no allowable generic or linking claim.

### ***Specification***

The title of the invention is not sufficiently descriptive. "The title should be brief but technically accurate and descriptive and should contain fewer than 500 characters," MPEP §606. Specifically, statements concerning the general type or nature of the entire system or its components that are common to many other similar elements or systems that are known in the art are not sufficiently descriptive to provide "informative value in indexing, classifying, searching, etc.," MPEP §606.01. Examiner recommends directing the title to what Applicant believes is the point of novelty, including key structural features, since it is by the novelty that "indexing, classifying, searching, etc." is generally accomplished. Nevertheless, it should be noted that, pursuant to MPEP §606.01, "[i]f a satisfactory title is not supplied by the applicant, the examiner may, at the time of allowance, change the title by examiner's amendment."

A new title is required that is more clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Bourdelais (US 2004/0229022).

Regarding independent claim 1, Bourdelais discloses a holographic record carrier (para. 10, 4; i.e., holographic security articles/indicia) in or from which information is recorded or reproduced by irradiation of light (para. 4), characterized by comprising: a holographic recording layer (44) for storing a light interference pattern based on components of coherent reference light and signal light as a diffraction grating in the inside thereof (para. 4); and a reflective function layer (42) laminated on a side opposite to a light incidence side of said holographic recording layer, said reflective function layer being sensitive to the intensity of irradiated light so that a non-reflective region (via e.g. 54) appears in an irradiated portion thereof (i.e., by light pattern).

Regarding claim 2, Bourdelais further discloses said non-reflective region of said reflective function layer has a transmittance as a characteristic value higher than that at the time of non-irradiation of light (i.e., by light passing through 54).

Regarding claim 3, Bourdelais further discloses said non-reflective region of said reflective function layer is a pinhole (54).

Regarding claim 4, Bourdelais further discloses said non-reflective region of said reflective function layer has an absorption factor as a characteristic value higher than that at the

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time of non-irradiation of light. Although the prior art does not specifically disclose the claimed absorption factor, this feature is seen to be an inherent teaching of that device since light has to be impinging on the device versus not is disclosed, and it is apparent that absorption is less when the light is not impinging must be present for the device to function as intended.

Regarding claim 5, Bourdelais further discloses said non-reflective region of said reflective function layer has a reflectivity as a characteristic value lower than that at the time of non-irradiation of light (para. 44; i.e., light can pass through).

Regarding claim 9, Bourdelais further discloses said light interference pattern is formed by a first light beam to record a hologram (para. 4), and said reflective function layer is sensitive to a second light beam to form said non-reflective region. Moreover, the further limitations of claim 9 are directed to method steps of making the device, and it could have been made using an alternative method such as a second beam to make the holes. The method limitations are not germane to patentability pursuant to MPEP §2112.02, since it has been held that “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.’ *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted).”

Regarding claim 10, Bourdelais further discloses said holographic recording layer has a sensitivity to a wavelength of said first light beam higher than that to a wavelength of said second light beam (para. 38; and because of the size of the holes), and said reflective function

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layer is made of a phase-change film or pigment film in which its sensitivity to the wavelength of said second light beam is set to be higher than that to the wavelength of said first light beam (para. 4, 38: i.e., similar not identical wavelengths, polymers).

Regarding claim 11, Bourdelais further discloses that an appearance of said non-reflective region is based on the wavelength of said first light beam (para. 38; and because of the size of the holes).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourdelais (US 2004/0229022) in view of Dausmann (US 2003/0133401).

Regarding claims 6 and 7, Examiner makes the following findings of fact: Bourdelais does not explicitly disclose that said reflective function layer has tracks extending apart from one another without crossing with one another for causing spots of light beams to be focused after

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passing through said holographic recording layer and said reflective function layer from an objective lens to follow said tracks; said tracks are formed in spiral shape, in spiral arc shape or in concentric shape.

Bourdelaïs and Dausmann are related as optical security devices. Dausman discloses that said reflective function layer has tracks (abstr; para. 1) extending apart from one another without crossing with one another for causing spots of light beams to be focused after passing through said holographic recording layer and said reflective function layer from an objective lens (i.e., known as needed to read CDs) to follow said tracks (abstr.); said tracks are formed in spiral shape, in spiral arc shape or in concentric shape (abstr; para. 1). The benefits of the pattern of Dausmann is the standard read-type of CD players, allowing copyright security as well as standard use-ability for consumers.

Therefore, Examiner concludes that it would have been obvious to an ordinarily skilled artisan at the time of invention to make the Article of Bourdelaïs have spiral tracks for balance of security and consumer issues.

Regarding claim 8, Bourdelaïs does not explicitly disclose that said tracks are formed in parallel to one another. However, parallel tracks are well known in the art. The benefit is the simplicity of hardware required to read from the recording medium (i.e., no spinning).

Therefore, it would have been obvious to an ordinarily skilled artisan at the time of invention to use known parallel tracks in the recording medium to improve the simplicity of read-back.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer L. Doak whose telephone number is (571)272-9791. The examiner can normally be reached on Mon-Thurs: 7:30A-5:00P, Alt Fri: 7:30A-4:00P (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. L. D./  
Examiner, Art Unit 2872

/Stephone B. Allen/  
Supervisory Patent Examiner  
Art Unit 2872